

REMARKS

This Amendment is responsive to the Office Action dated November 13, 2007.

Applicants have amended claims 3, 5, 6, 19, 21, 22, 35, 37 and 38 for clarity purposes unrelated to patentability, and added new claims 74-105. Claims 1-49, 52-57, 60-65 and 68-105 are now pending.

Summary of the Examiner's Rejections

The Office Action rejected claims 1-9, 16-25, 32-41 and 48 under 35 U.S.C. 102(b) as being anticipated by Thakker (US 6,487,425 B1).

The Office Action rejected claims 6, 22 and 38 under 35 U.S.C. 103(a) as being unpatentable over Thakker in view of Deschepper (US 6,741,848 B2). Applicants have presumed that the Office Action meant to cite Timonen (US 6,741,848 B2) in this rejection. US Patent 6,741,848 was awarded to Timonen, not Deschepper. Applicants have noted this same discrepancy in the previous *four* responses.

The Office Action rejected claims 10, 26 and 42 under 35 U.S.C. 103(a) as being unpatentable over Thakker in view of Eber et al. (US 6,595,414 B2).

The Office Action rejected claims 11-13, 27-29 and 43-45 under 35 U.S.C. 103(a) as being unpatentable over Thakker in view of Barvesten (EP 0607767A1).

The Office Action rejected claims 14, 15, 30, 46 and 47 under 35 U.S.C. 103(a) as being unpatentable over Thakker in view of Barvesten and Timonen.

The Office Action rejected claims 49, 52, 53, 55-57, 60, 61, 63-65, 68, 69 and 71-73 under 35 U.S.C. 103(a) as being unpatentable over Thakker in view of Barvesten.

The Office Action rejected claims 54, 62 and 72 under 35 U.S.C. 103(a) as being unpatentable over Thakker in view of Barvesten and Timonen.

Summary of Pending Claims

All pending claims recite the supply of power or the termination of power to a subscriber identity module (SIM) based on whether a request is pending for service by the SIM or the device requests maintenance of power to the SIM. In this manner, the power management techniques recited in each of Applicants' independent claims permit power conservation within a

wireless communication device (WCD) without undermining SIM performance. According to Applicants' claims, power is terminated to the SIM when no request is pending for service by the SIM and no software module running on the WCD requests maintenance of power to the SIM.

Furthermore, all pending independent claims require management of power to a SIM in a WCD when power is supplied to the WCD during operation of the WCD. Thus, the power management features of independent claims 1, 17, 33, 49, 57 and 65 apply when power is supplied to the WCD, and are distinguished from any conventional sleep mode techniques in which power to the WCD is disabled, or the WCD operates in a so-called "low power" mode not necessarily associated with the SIM.

New claims 74-105 recite similar features to those of Applicants' other claims, but these claims recite different the subject matter in different statutory classes.

Analysis of the Rejections in the Office Action

Applicants respectfully traverse rejections advanced in the current Office Action, and respectfully request the Examiner's reconsideration. The applied prior art fails to disclose or suggest the features recited in Applicants' claims, and provides no teaching that would have led a person of ordinary skill in the art to arrive at Applicants' claimed invention.

In particular, the newly cited Thakker reference lacks not one, but many features that are recited in Applicants' independent claims. Therefore, the rejections of Applicants' independent claims 1, 17 and 33 under 35 U.S.C. 102(b) are improper. For the same reasons, namely that the Office Action has misinterpreted the teaching of the Thakker reference relative to Applicants' claims, the rejections of Applicants independent claims 49, 57 and 65 under 35 U.S.C. 103(a) are also improper.

With respect to the features recited in Applicants' independent claims, the Office Action misinterpreted Thakker. This reference does not disclose or suggest the features that the Office Action attributes to this reference. Each passage of Thakker, which was cited in the Office Action in support of the rejections of Applicants' independent claims, is analyzed below.

The Office Action indicated that Thakker discloses a method for controlling power to a subscriber identify module (SIM) in a wireless communication device (WCD). The Office

Action cited no particular passage of Thakker in support of this assertion. The conclusion in the Office Action on this point is incorrect.

Thakker does not, in fact, disclose any techniques for controlling power to a SIM in a WCD. Like many of the previously cited references (which the Examiner has withdrawn from previous rejections), the Thakker reference is concerned with power management of the WCD and not the SIM within the WCD. While Thakker mentions the use of a SIM, and discusses power management to a WCD, this reference lacks any teaching or suggestion of any method or technique for controlling power to a SIM in a WCD.

Thakker generally teaches a method of supporting a switch from a limited operations low power operating mode of a mobile station to a normal operating mode of the mobile station. See Abstract of Thakker. Nothing in the disclosure of Thakker even discusses whether power is supplied to a SIM (or disabled) in these different modes.

Thakker teaches a technique in which a mobile station informs the network that it is entering into a low power operating mode, and the network acknowledges that the mobile station is in the low power operating mode. See Abstract of Thakker. Calls can be made to a number associated with the low power operating mode, but such calls to the number associated with the lower power operating mode cause the mobile station to switch to the normal operating mode. Again, nothing in Thakker even discusses whether or not power is supplied to a SIM in the different modes, much less teaches the specific features of Applicants' claims that require the supply of power or the termination of power to a SIM based on whether a request is pending for service by the SIM or the device requests maintenance of power to the SIM.

The Office Action indicated that Thakker discloses the following:

supplying power to the SIM [citing column 5, lines 28-37 of Thakker] when a request is pending for service by the SIM [citing column 6, lines 28-49 of Thakker];

supplying power to the SIM when a software module running on the WCD requests maintenance of power to the SIM [citing column 6, lines 28-49 of Thakker]; and

terminating power to the SIM when no request is pending for service by the SIM and no software module running on the WCD requests maintenance of power to the SIM [citing column 7, lines 42-64 of Thakker].

Each of these different passages of Thakker, which were cited in the Office Action in support of the rejections of Applicants' independent claims, is reproduced below.

The passage of Thakker at column 5, lines 28-37 states:

The MS 12 usually includes a mobile transceiver and a Subscriber Identity Module (SIM). The SIM may include an identity indicator (a "secret" key for authentication), and other relevant network/user information. The mobile transceiver itself is uniquely identified by the International Mobile Equipment identify (IMEI-typically, a telephone number). The identification features of the MS 12 are independent, thereby allowing mobility of the subscriber about the service area of the GSM network 11.

This passage appears to be the only passage of Thakker that even mentions a SIM. Contrary to the analysis of the Office Action, nothing in this passage or any passage of Thakker discloses or suggests any type of method for controlling power to a SIM, much less the specific features of Applicants' claims that require the supply of power or the termination of power to a SIM based on whether a request is pending for service by the SIM or the device requests maintenance of power to the SIM.

The passage of Thakker at column 6, lines 28-49 states:

The telecommunication system 60 is seen to include a PLMN or GSM network 40 adapted to communicate with the MS 50 and to cause it to switch from a limited operations low power mode to a normal operating mode when a call placed to an MSISDN number associated with the limited operations low power mode is detected. The GSM network 40 uses standard wireless signaling protocols between the MS 50 and the MSC 42 to detect, for instance, if the subscriber has placed the MS 50 in the limited operations low power mode and to transmit A-interface messages to the MS 50 which carry the POP message. The POP message is received by the MS 50 and used to switch to a normal operating mode of the MS 50.

As such, the MSC 42 is configured to provide a new A-interface message 44 that instructs the MS 50 to switch from the limited operations low power mode to a normal operating mode. The A-interface message provides direct communications between the MS 50 and the MSC 42 or between the MSC 42 and the BSC 46. This provides a mechanism within the network PLMN for direct interface between different elements in the GSM network 40.

This passage lacks any teaching that suggests the features of Applicants claims, and does not disclose the features that the Office Action attributed to this passage. In particular, the passage at column 6, lines 28-49, lacks any suggestion of supplying power to the SIM when a request is pending for service by the SIM and supplying power to the SIM when a software module running on the WCD requests maintenance of power to the SIM.

The passage of Thakker at column 6, lines 28-49 teaches a "limited operations mode," but lacks any discussion of whether or not power is supplied or terminated to the SIM. In fact,

the teaching at column 6, lines 28-49, does not discuss any specifics of the “limited operations mode,” but concerns the manner in which a network can instruct the mobile state to switch from the limited operations low power mode to a normal operating mode.

Furthermore, the passage of Thakker at column 6, lines 28-49 specifically indicates that the “subscriber” places the mobile station in the limited operations mode. In this case, the “subscriber” appears to be a user that takes physical action on the mobile station. Accordingly, this teaching of Thakker at column 6, lines 28-49 contrasts the features of Applicants’ claims, which do not necessarily require any physical action by a subscriber. Instead, Applicants’ claims require supplying power to the SIM when a request is pending for service by the SIM and supplying power to the SIM when a software module running on the WCD requests maintenance of power to the SIM, and such features may operate independent of any action by the subscriber.

The passage of Thakker at column 7, lines 42-64 states:

Once the GSM network 40 has sent a POP mode acknowledgment message (at signal sequence 94) to the MS 50, the MS 50 will remain in the limited operations low power mode, listening only for POP messages from the GSM network 40. While in POP mode, the MS 50 operates using minimal power where, for example, only critical operations are maintained and the display is blank and no outgoing calls are made unless POP mode is disabled, using the POP OFF button 74, for example.

Regardless of the amount of power utilized by the MS 50 during limited operations low power, the MS 50 continues to perform a few critical functions. For example, the MS 50 is responsible to inform the network 40 of its location as illustrated by the location update request signal sequence 96. Thus, the MS 50 powers up periodically in order to ascertain its location and update the network 40. This positioning is performed by allowing the MS 50 to send a LOCATION UPDATE REQUEST message to the GSM network 40. The GSM network 40, in turn, sends a LOCATION UPDATING ACCEPT message at signal sequence 98, to the MS 50. By continuously updating the location of the MS 50 in the GSM network 40, a subscriber may be reached, even while the MS 50 is in POP mode.

Nothing in this passage of Thakker at column 7, lines 42-64 discloses the features attributed to it by the Office Action. In particular, contrary to the statements in the Office Action, the passage of Thakker at column 7, lines 42-64, does not disclose terminating power to the SIM when no request is pending for service by the SIM and no software module running on the WCD requests maintenance of power to the SIM. These features are simply not discussed in the passage reproduced above. Applicants are generally perplexed by the assertion in the Office Action that

these features are taught in the passage copied above. On the contrary, this passage of Thakker describes location updates and POP messaging, neither of which bears any relevance to the requirements of the claims.

In short, contrary to the analysis in the Office Action, Thakker fails to suggest supplying power to the SIM when a request is pending for service by the SIM, supplying power to the SIM when a software module running on the WCD requests maintenance of power to the SIM, and terminating power to the SIM when no request is pending for service by the SIM and no software module running on the WCD requests maintenance of power to the SIM as required by independent claims 1, 17, 33, 49, 57 and 65. While the Office Action cites several passages of Thakker in support of the rejections, these passages (reproduced above) are deficient, if not wholly irrelevant, with respect to the features of Applicants' independent claims.

Moreover, the pending claims require managing power to a SIM in a WCD when power is supplied to the WCD during operation of the WCD. These features also distinguish Thakker insofar as Thakker merely teaches low power modes for the WCD, and does not have any discussion, whatsoever, of power management to a SIM.

The cited passages of Thakker appear to teach nothing more than the fact that SIMs were known, and that power management techniques for a WCD were known. The power management techniques discussed in Thakker lack any teaching with respect to the supply or termination of power specifically to a SIM, much less the supply or termination of power to a SIM based on the specific contingencies of Applicants' claims.

Furthermore, the cited passages of Thakker indicate that the "subscriber" (i.e., the user) places the mobile station in the limited operations mode. This teaching of Thakker contrasts the features of Applicants' claims, which do not necessarily require any physical action by a subscriber. Instead, Applicants' claims require supplying power to the SIM when a request is pending for service by the SIM and supplying power to the SIM when a software module running on the WCD requests maintenance of power to the SIM, and such features may operate independent of any action by the subscriber. The user placing a mobile station in limited operations mode (per Thakker) is not suggestive of a technique that requires supplying power to the SIM when a request is pending for service by the SIM, supplying power to the SIM when a software module running on the WCD requests maintenance of power to the SIM, and

Application Number 09/867,363
Amendment dated 3/17/07
Responsive to Office Action mailed 11/13/07

terminating power to the SIM when no request is pending for service by the SIM and no software module running on the WCD requests maintenance of power to the SIM.

For at least the reasons outlined above, the Office Action fails to establish a prima facie case of novelty with respect to independent claims 1, 17 and 33, and has failed to establish a prima facie case of obviousness with respect to independent claims 49, 57 and 65.

Applicants reserve further comment with respect to the dependent claims, but do not acquiesce to the final Office Action's rejections of the claims, nor the Office Action's characterizations of the prior art relative to these claims. Therefore, Applicants reserve the right to present additional arguments with respect to one or more of the dependent claims.

New claims

New claims 74-105 are patentable for reasons similar to those advanced above. New claims 74-105 recite similar features to those of Applicants' other claims, but these claims recite different subject matter in different statutory classes. New claims 74-105 do not recite any new matter.

Application Number 09/867,363
Amendment dated 3/17/07
Responsive to Office Action mailed 11/13/07

Conclusion

All claims in this application are allowable over the current prior art being applied in the Office Action. Accordingly, Applicants respectfully request reconsideration and prompt allowance of all pending claims. Please charge any additional fees or credit any overpayment to deposit account number 17-0026. The Examiner is invited to telephone the below-signed attorney to discuss this application.

Date:

3/17/07
QUALCOMM, Inc.
5775 Morehouse Drive
San Diego, CA 92121
Telephone: (858) 651-1306
Facsimile: (858) 658-2502

By:

/George C. Pappas/
Name: George Pappas
Reg. No.: 35,065